FIG. 1

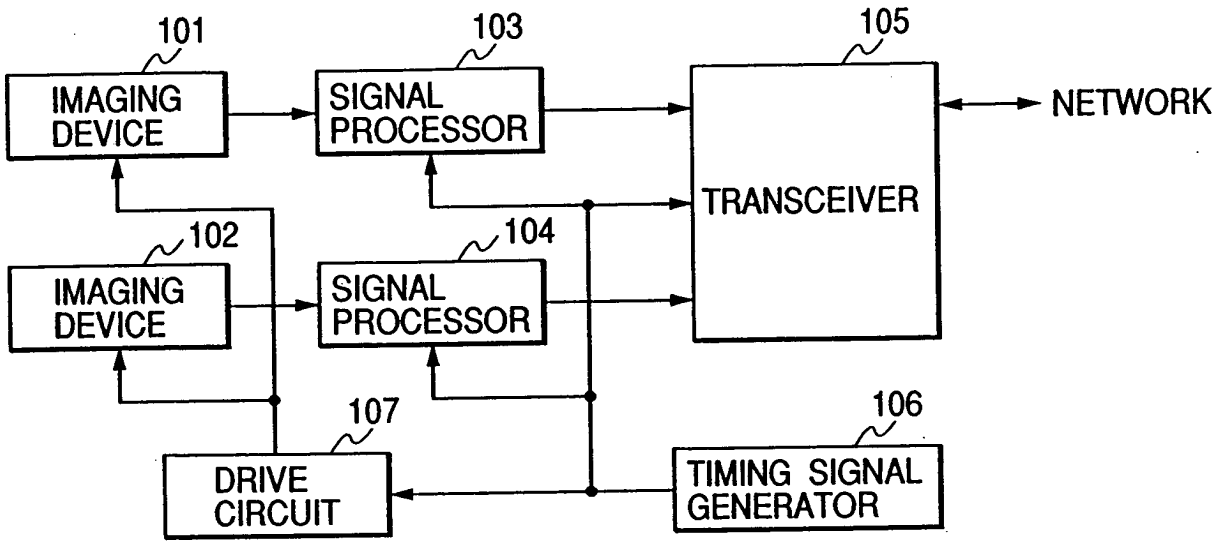

FIG. 2

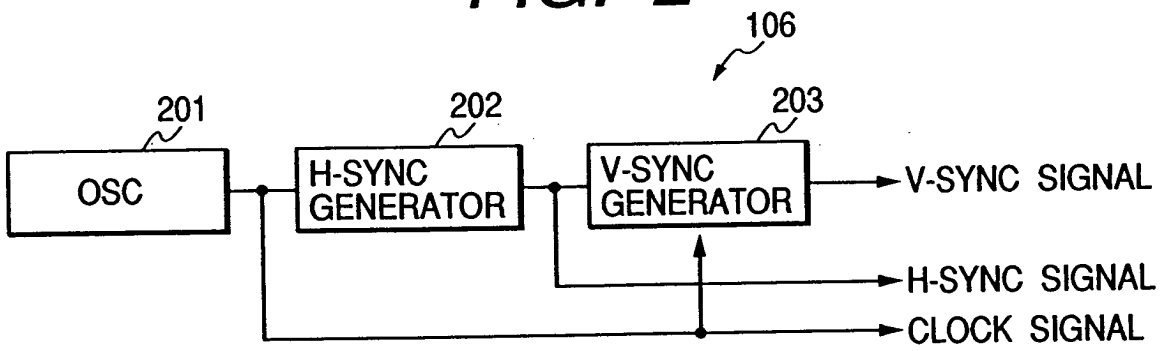

FIG. 3

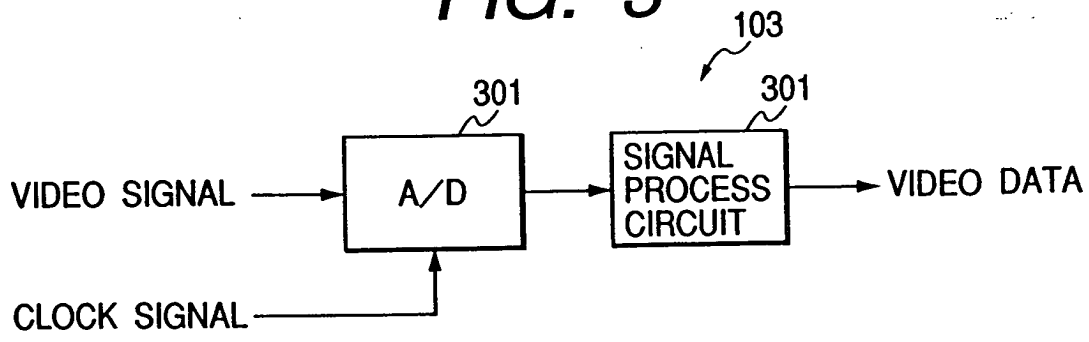

FIG. 4

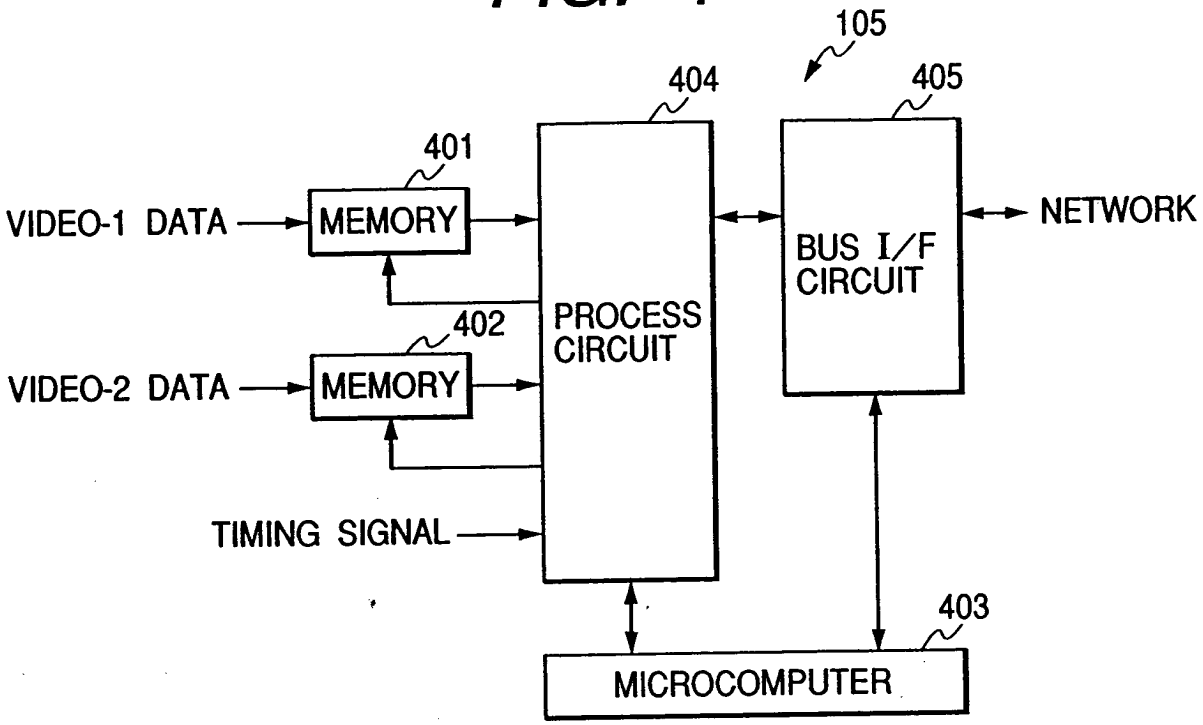
105
404
405
401
VIDEO-1 DATA
MEMORY
PROCESS CIRCUIT
BUS I/F CIRCUIT
NETWORK
402
VIDEO-2 DATA
MEMORY
TIMING SIGNAL
403
MICROCOMPUTER

FIG. 5

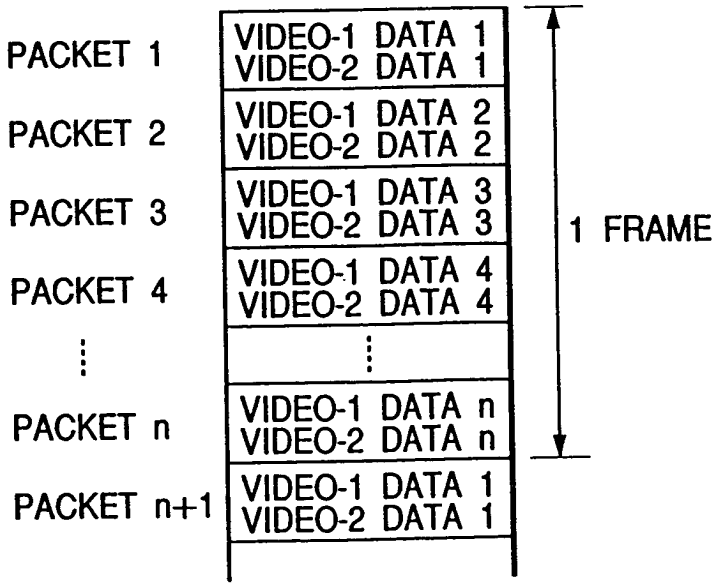
PACKET 1
VIDEO-1 DATA 1
VIDEO-2 DATA 1
PACKET 2
VIDEO-1 DATA 2
VIDEO-2 DATA 2
PACKET 3
VIDEO-1 DATA 3
VIDEO-2 DATA 3
PACKET 4
VIDEO-1 DATA 4
VIDEO-2 DATA 4
PACKET n
VIDEO-1 DATA n
VIDEO-2 DATA n
PACKET n+1
VIDEO-1 DATA 1
VIDEO-2 DATA 1
1 FRAME

FIG. 6

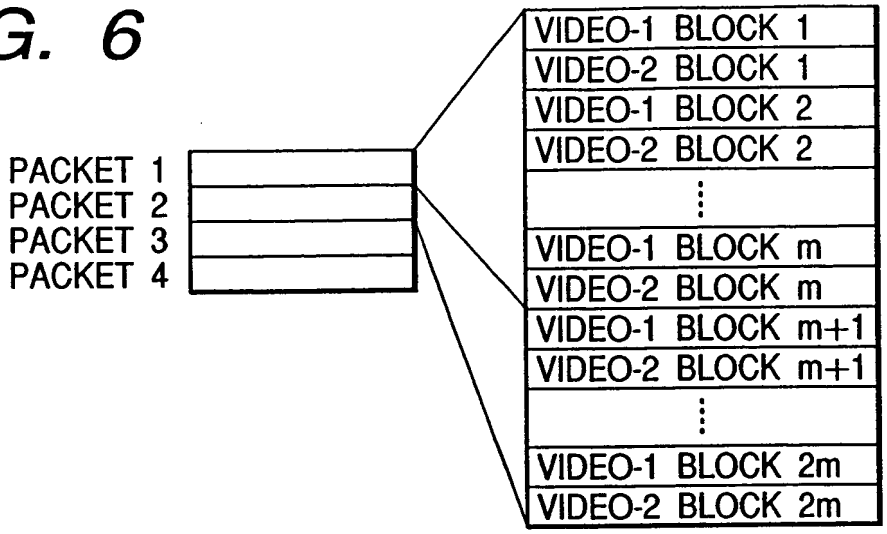

FIG. 7

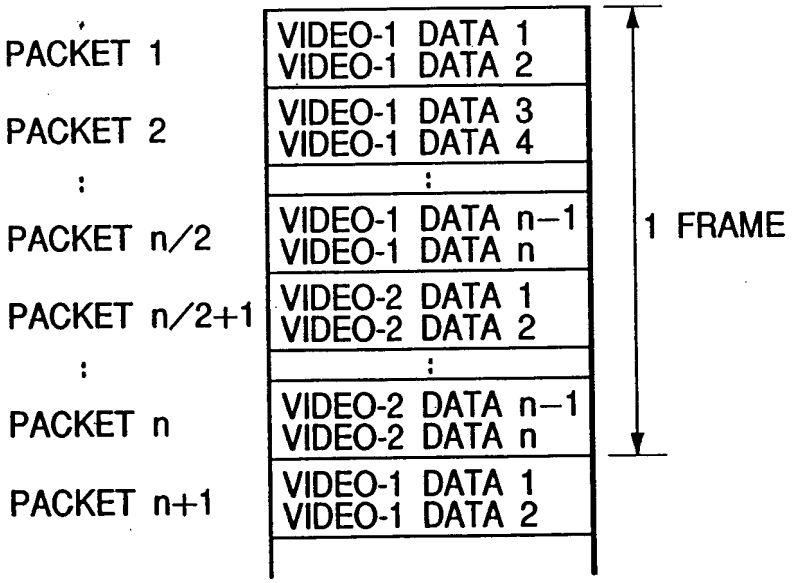

FIG. 8

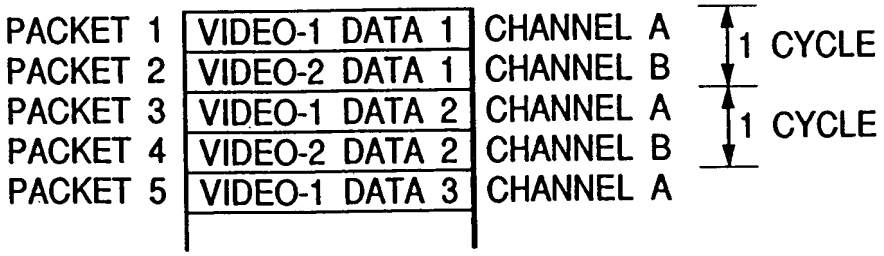

FIG. 9

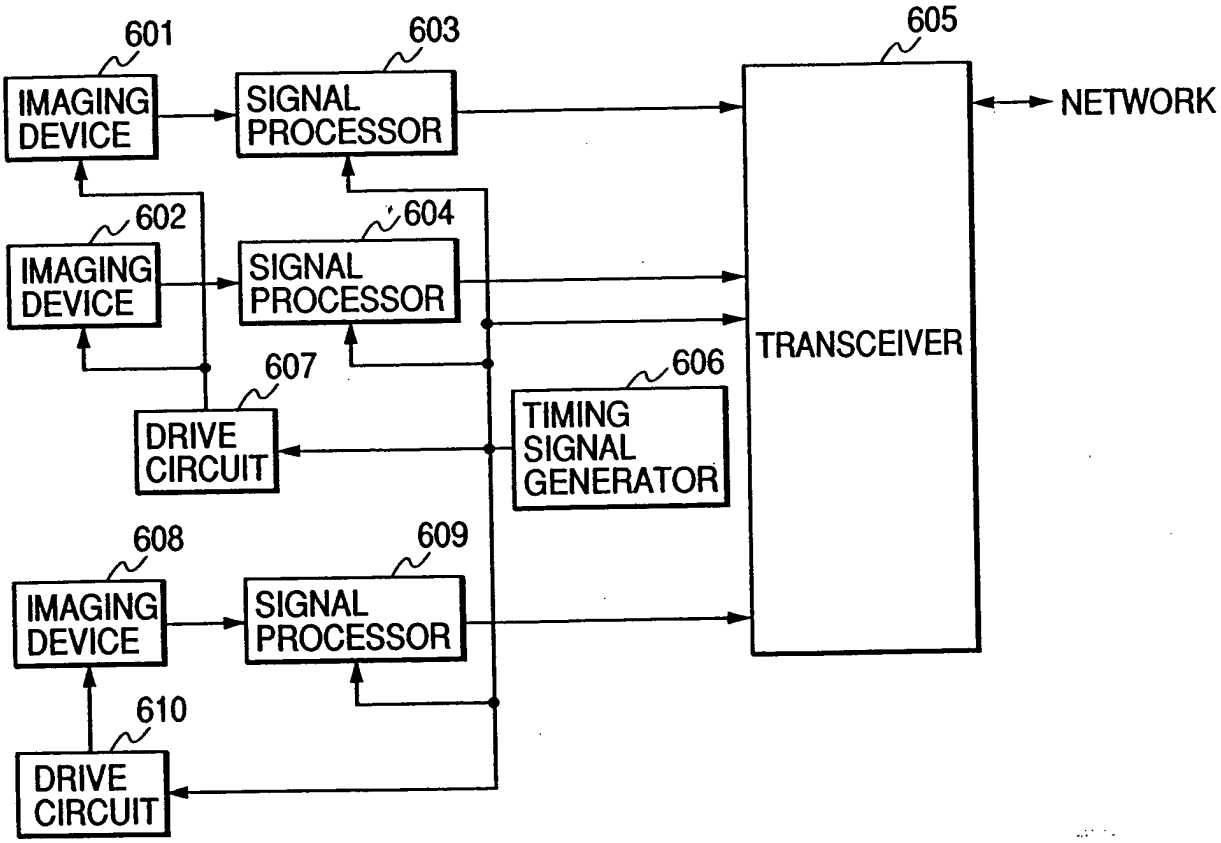
601
IMAGING DEVICE
603
SIGNAL PROCESSOR
605
NETWORK
602
IMAGING DEVICE
604
SIGNAL PROCESSOR
TRANSCEIVER
607
DRIVE CIRCUIT
606
TIMING SIGNAL GENERATOR
608
IMAGING DEVICE
609
SIGNAL PROCESSOR
610
DRIVE CIRCUIT

FIG. 10

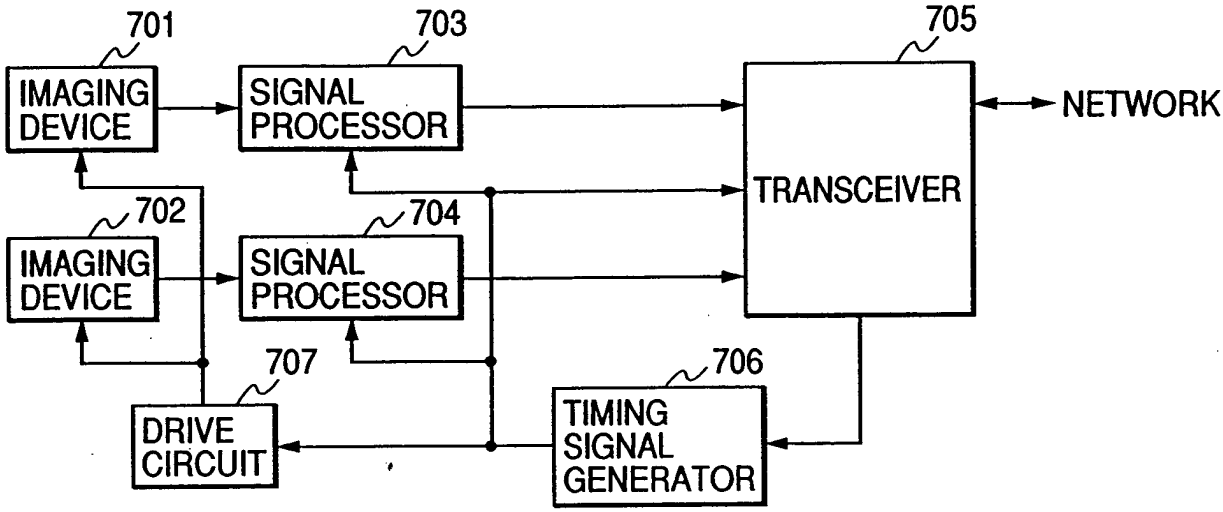
701
703
705
IMAGING DEVICE
SIGNAL PROCESSOR
NETWORK
TRANSCEIVER
702
704
IMAGING DEVICE
SIGNAL PROCESSOR
707
706
DRIVE CIRCUIT
TIMING SIGNAL GENERATOR

FIG. 11

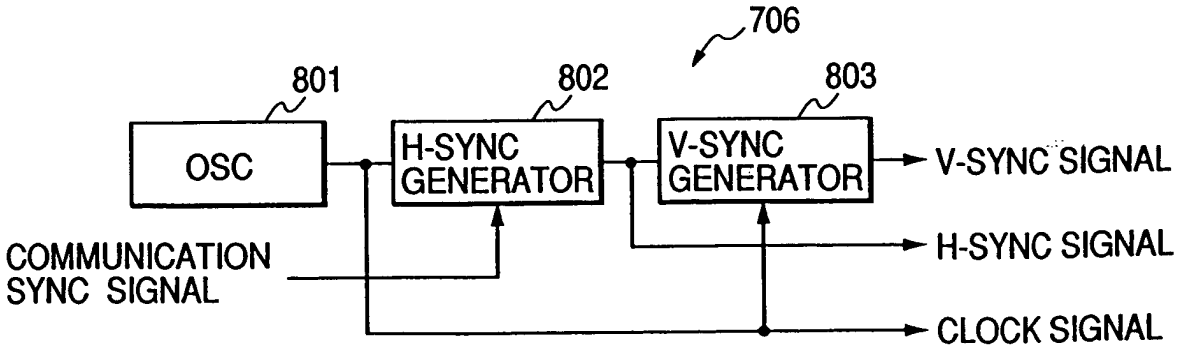
706
801
802
803
OSC
H-SYNC GENERATOR
V-SYNC GENERATOR
V-SYNC SIGNAL
H-SYNC SIGNAL
COMMUNICATION SYNC SIGNAL
CLOCK SIGNAL

FIG. 12

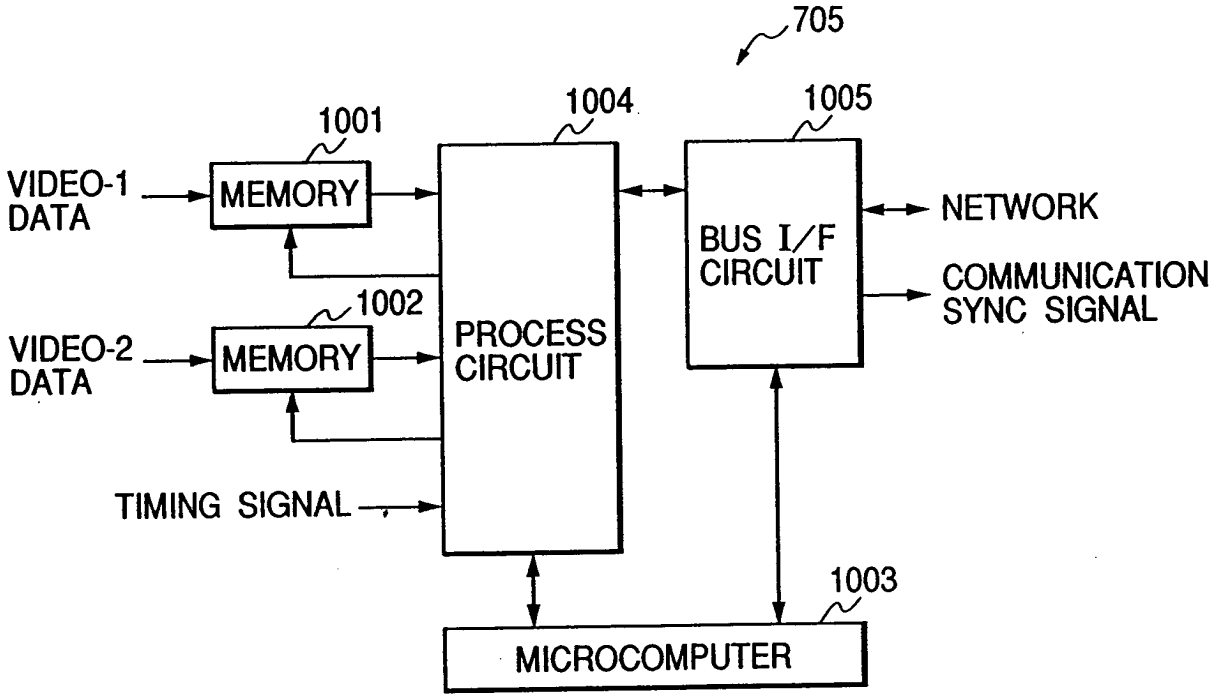
705
1001
1004
1005
VIDEO-1 DATA
MEMORY
1002
VIDEO-2 DATA
MEMORY
PROCESS CIRCUIT
BUS I/F CIRCUIT
NETWORK
COMMUNICATION SYNC SIGNAL
TIMING SIGNAL
1003
MICROCOMPUTER

FIG. 13

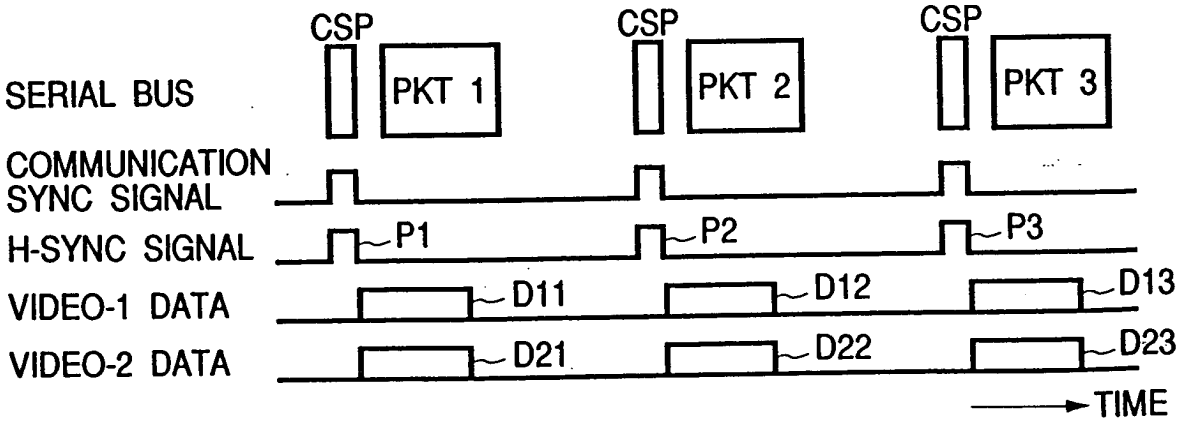
CSP
CSP
CSP
SERIAL BUS
PKT 1
PKT 2
PKT 3
COMMUNICATION SYNC SIGNAL
H-SYNC SIGNAL
P1
P2
P3
VIDEO-1 DATA
D11
D12
D13
VIDEO-2 DATA
D21
D22
D23
TIME

FIG. 14

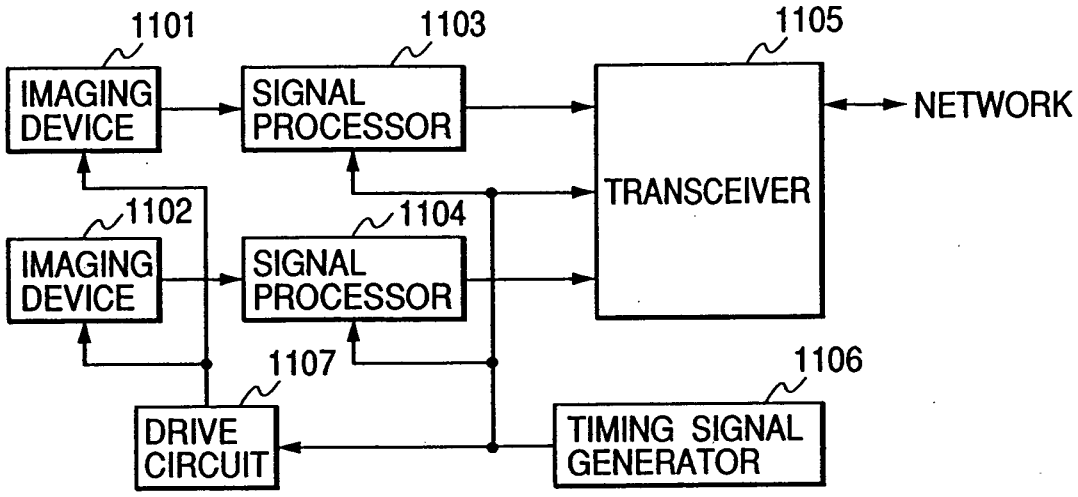
1101
1103
1105
IMAGING DEVICE
SIGNAL PROCESSOR
NETWORK
TRANSCEIVER
1102
1104
IMAGING DEVICE
SIGNAL PROCESSOR
1107
1106
DRIVE CIRCUIT
TIMING SIGNAL GENERATOR

FIG. 15

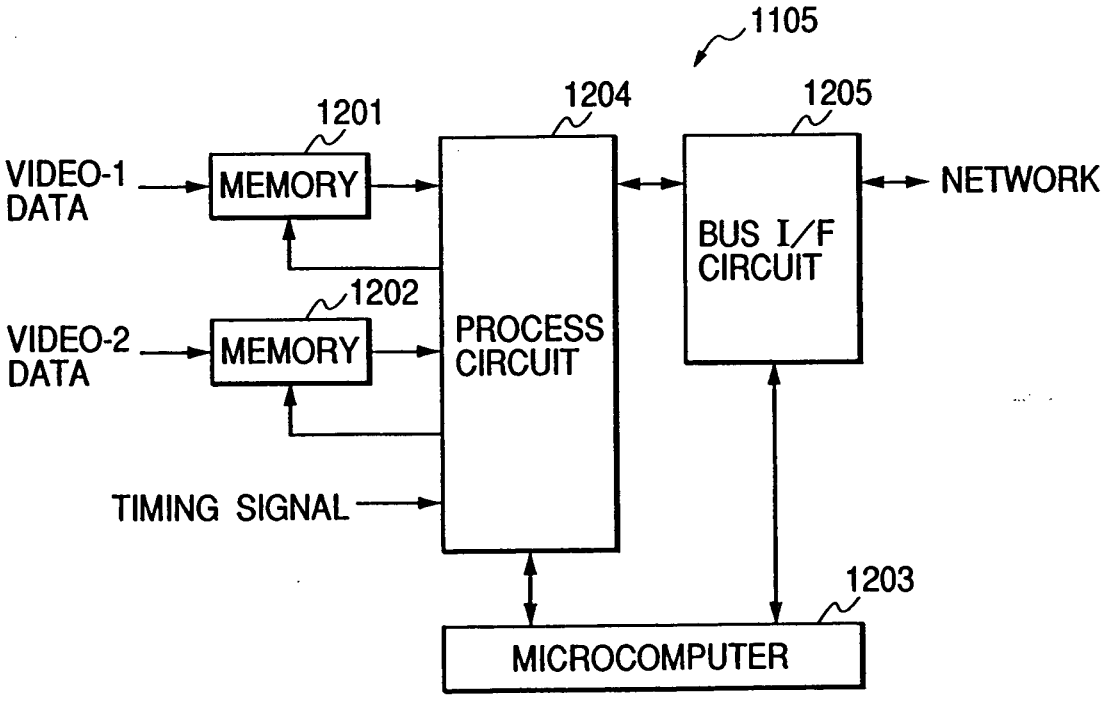
1105
1201
1204
1205
VIDEO-1 DATA
MEMORY
NETWORK
BUS I/F CIRCUIT
1202
VIDEO-2 DATA
MEMORY
PROCESS CIRCUIT
TIMING SIGNAL
1203
MICROCOMPUTER

FIG. 16

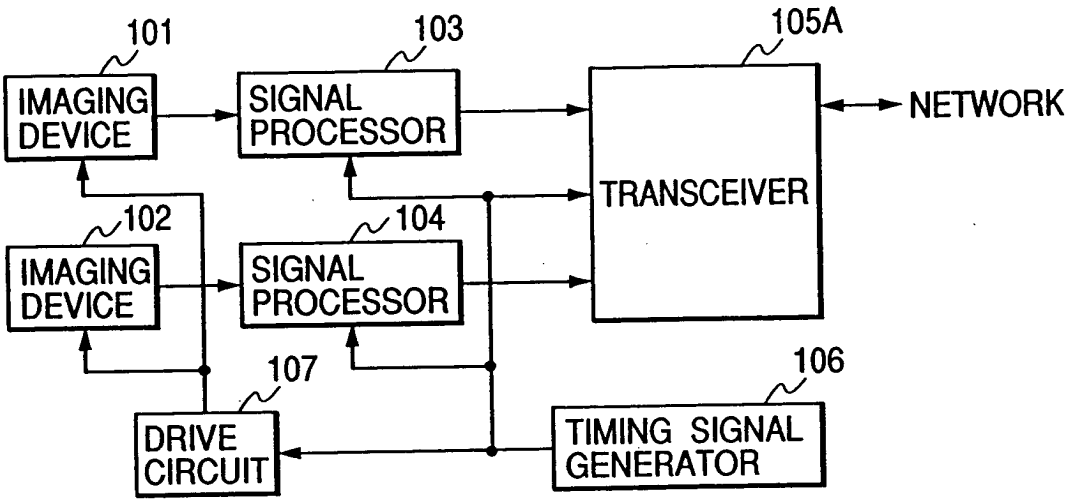
101
IMAGING DEVICE
103
SIGNAL PROCESSOR
105A
TRANSCEIVER
NETWORK
102
IMAGING DEVICE
104
SIGNAL PROCESSOR
107
DRIVE CIRCUIT
106
TIMING SIGNAL GENERATOR

FIG. 17

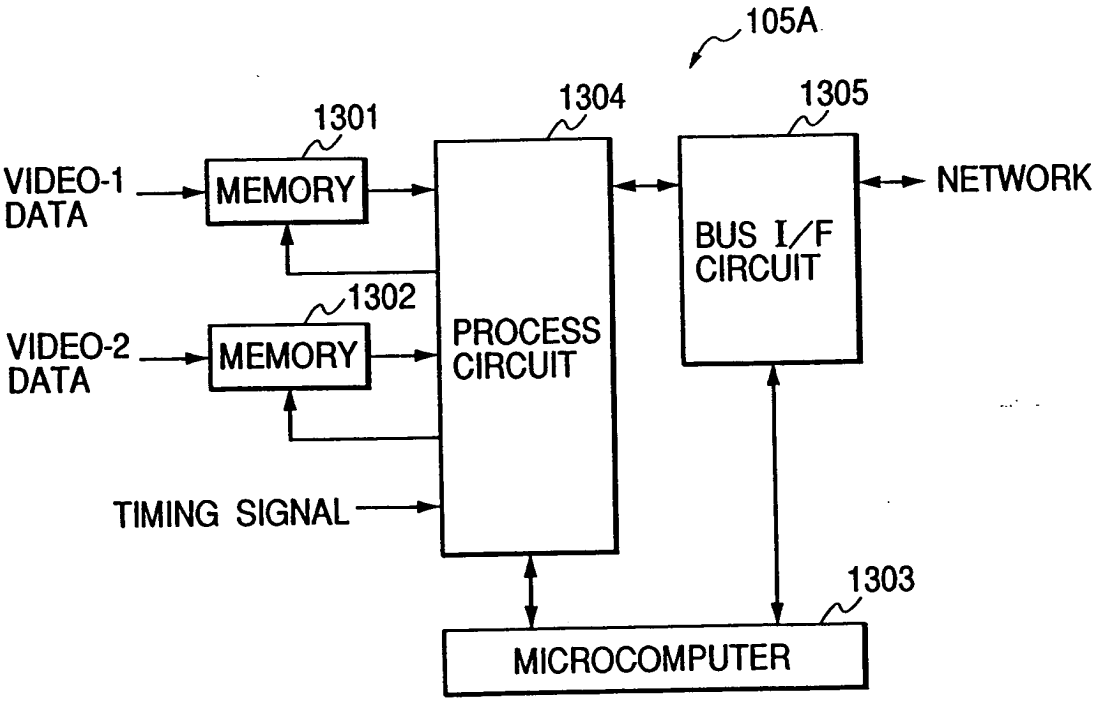
105A
1301
1304
1305
VIDEO-1 DATA
MEMORY
BUS I/F CIRCUIT
NETWORK
1302
VIDEO-2 DATA
MEMORY
PROCESS CIRCUIT
TIMING SIGNAL
1303
MICROCOMPUTER

FIG. 18

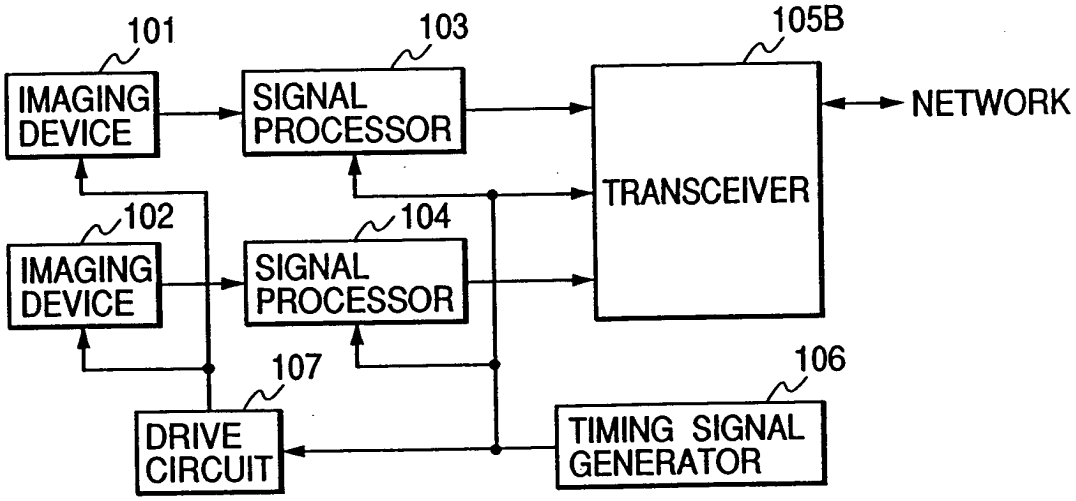
101
IMAGING DEVICE
103
SIGNAL PROCESSOR
105B
TRANSCEIVER
NETWORK
102
IMAGING DEVICE
104
SIGNAL PROCESSOR
107
DRIVE CIRCUIT
106
TIMING SIGNAL GENERATOR

FIG. 19

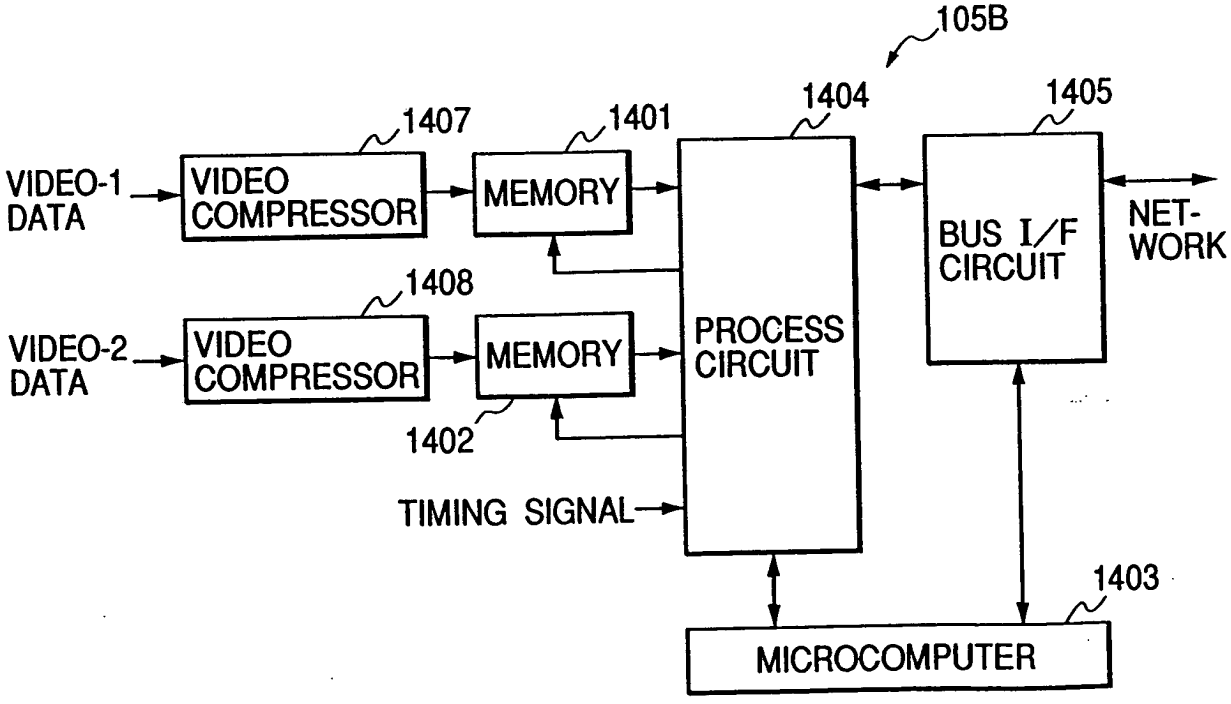
105B
1404
1405
1407
1401
VIDEO-1 DATA
VIDEO COMPRESSOR
MEMORY
BUS I/F CIRCUIT
NET-WORK
1408
VIDEO-2 DATA
VIDEO COMPRESSOR
MEMORY
PROCESS CIRCUIT
1402
TIMING SIGNAL
1403
MICROCOMPUTER

FIG. 20

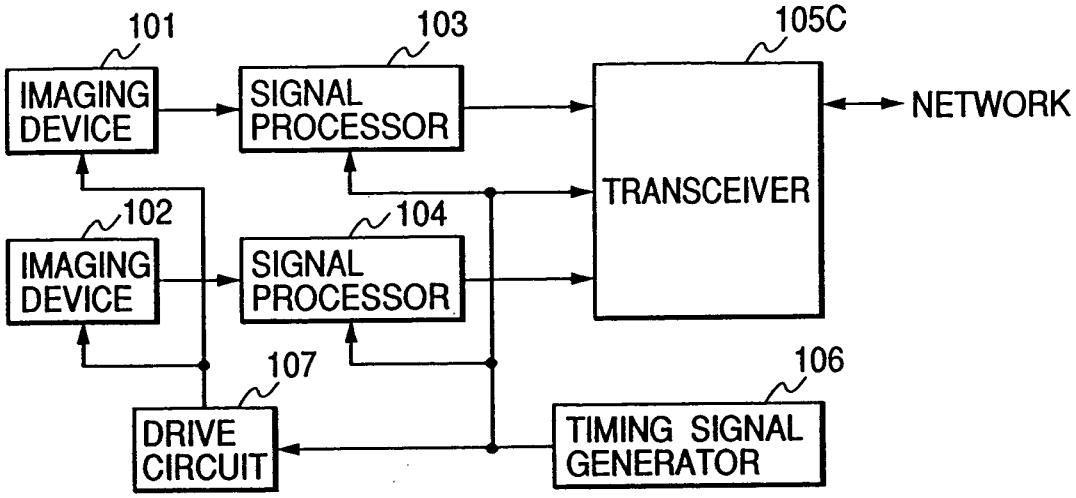
101
IMAGING DEVICE
103
SIGNAL PROCESSOR
105C
TRANSCEIVER
NETWORK
102
IMAGING DEVICE
104
SIGNAL PROCESSOR
107
DRIVE CIRCUIT
106
TIMING SIGNAL GENERATOR

FIG. 21

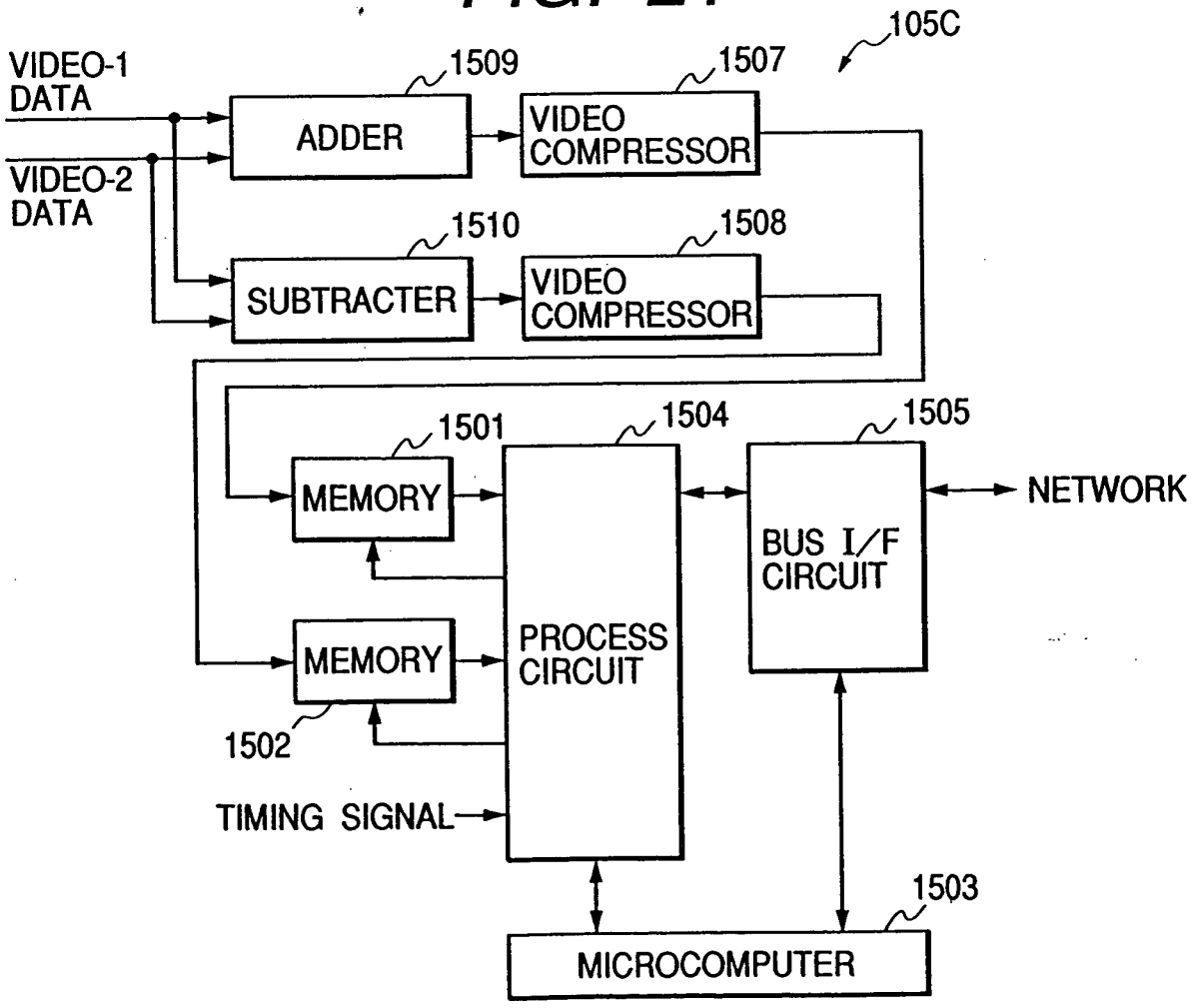
105C
VIDEO-1 DATA
VIDEO-2 DATA
1509
ADDER
1507
VIDEO COMPRESSOR
1510
SUBTRACTER
1508
VIDEO COMPRESSOR
1501
MEMORY
1504
PROCESS CIRCUIT
1505
BUS I/F CIRCUIT
NETWORK
MEMORY
1502
TIMING SIGNAL
1503
MICROCOMPUTER

FIG. 22

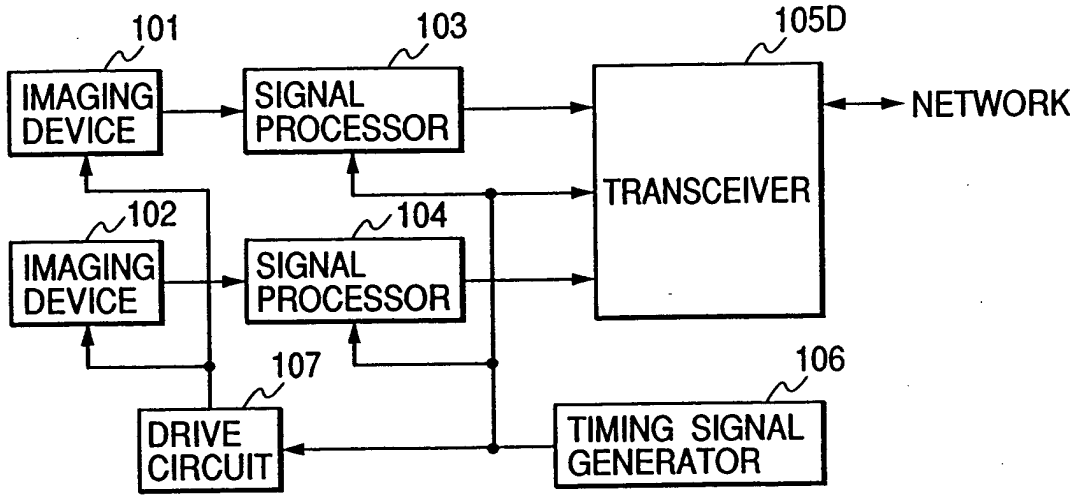
101
IMAGING DEVICE
103
SIGNAL PROCESSOR
105D
TRANSCEIVER
NETWORK
102
IMAGING DEVICE
104
SIGNAL PROCESSOR
107
DRIVE CIRCUIT
106
TIMING SIGNAL GENERATOR

FIG. 23

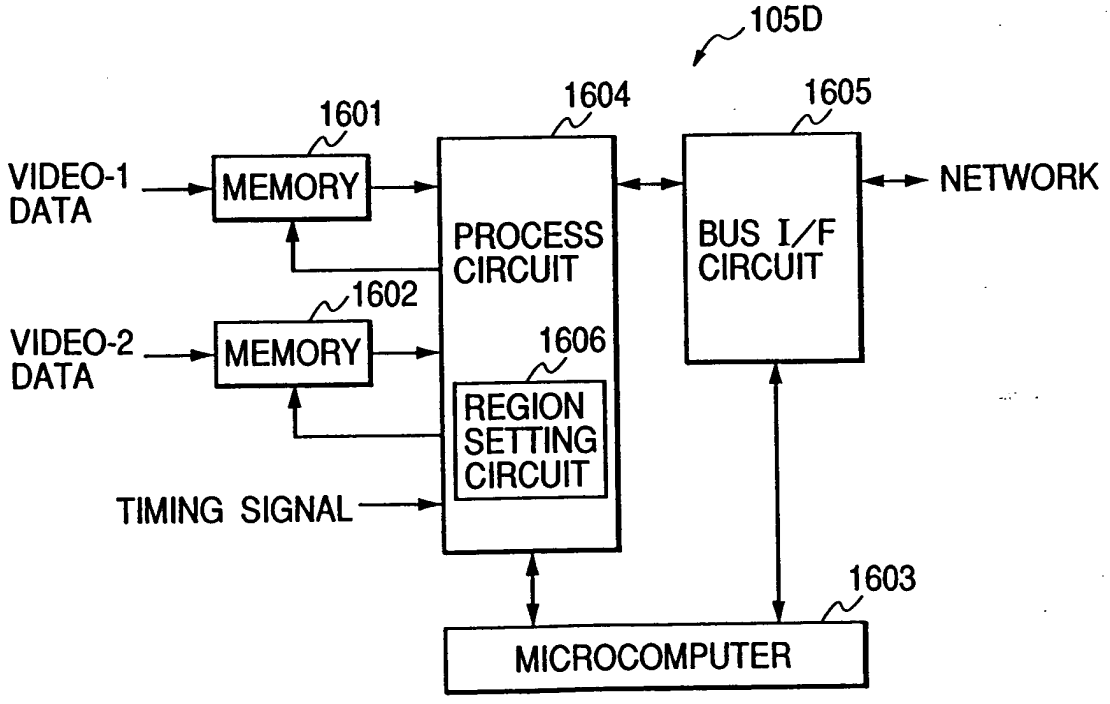
105D
1601
VIDEO-1 DATA
MEMORY
1602
VIDEO-2 DATA
MEMORY
TIMING SIGNAL
1604
PROCESS CIRCUIT
1606
REGION SETTING CIRCUIT
1605
BUS I/F CIRCUIT
NETWORK
1603
MICROCOMPUTER

FIG. 24

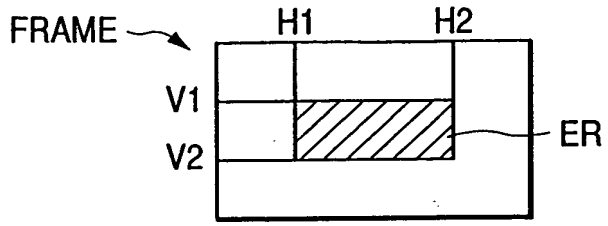

FIG. 25

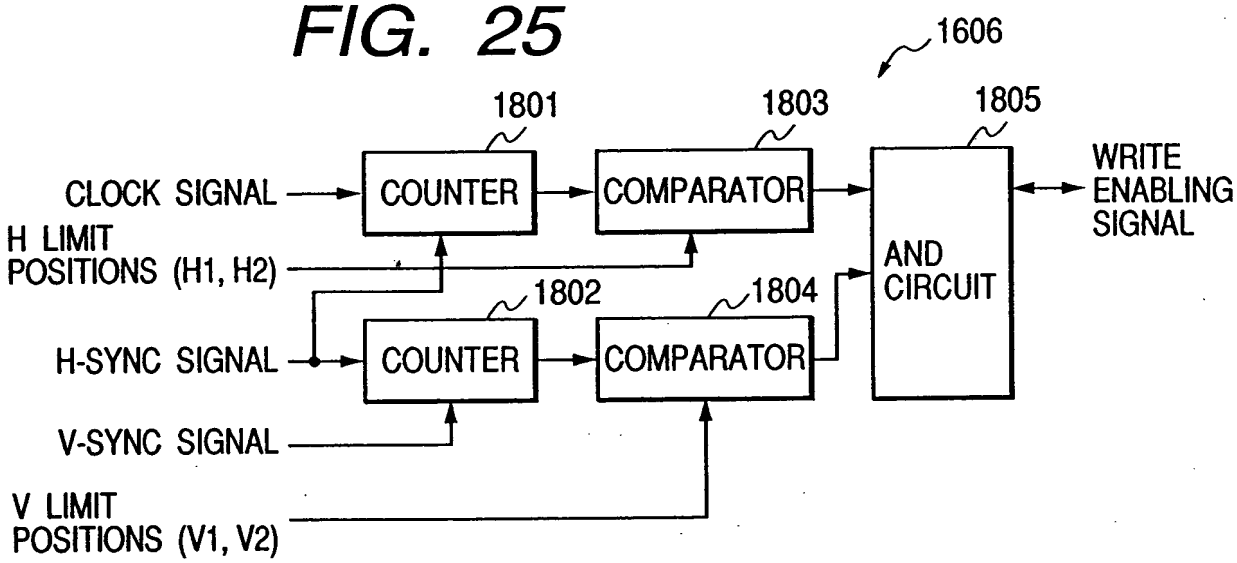
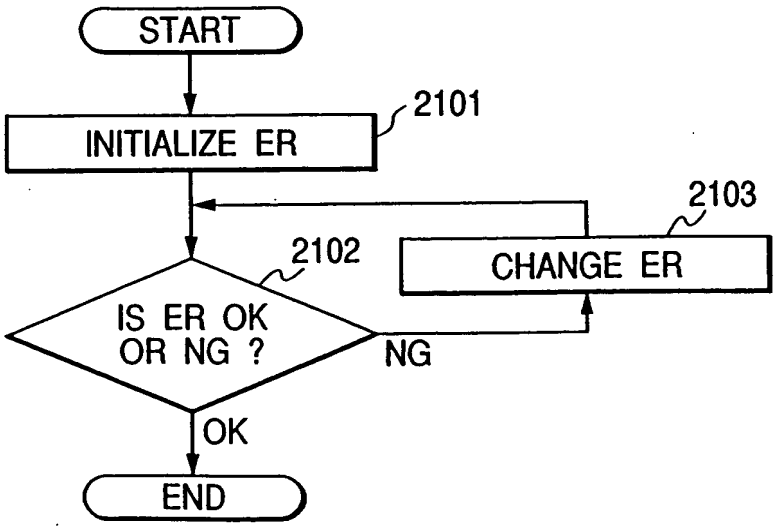
FIG. 26